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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,460	09/11/2003	Robert Boock	022956-0223	7148

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EXAMINER

HOEKSTRA, JEFFREY GERBEN

ART UNIT	PAPER NUMBER
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3736

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/661,460	Applicant(s) BOOCK ET AL.	
	Examiner Jeffrey G. Hoekstra	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice of Amendment

1. In response to the amendment filed on 8/22/06, amendment(s) to the specification, amended claim(s) 1, and canceled claim(s) 26-30, is/are acknowledged. The current rejections of the claim(s) 1-25 is/are *withdrawn*. The following new and reiterated grounds of rejection are set forth:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5-7, 10-16, and 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Stockmeier (US 5,195,956).

4. For claim 1, Stockmeier discloses a tissue extraction and maceration device, comprising: an outer tube (1) with an open distal end; a shaft (3 and 12) disposed within said outer tube articulating between a first-proximal (R) and second-distal (A) positions operably exposing the distal end of the shaft from the outer tube, as best seen in Figure 1; a tissue harvesting tip (4 and 5) disposed on the distal end of said shaft for excising tissue; and a cutting member (14) coupled to said shaft proximal to the tissue harvesting tip for macerating tissue.

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5. For claims 5-7, Stockmeier discloses a tissue extraction and maceration device, wherein the open distal end of the outer tube is defined by an angled edge wall that is angled with respect to a longitudinal axis of the outer tube, as best seen in Figure 1, said angle capable of being about 40 degrees.

6. For claims 10 and 11, Stockmeier discloses a tissue extraction and maceration device, wherein the cutting member (14) comprises at least one curved blade member extending radially from the shaft, as best seen in Figure 2.

7. For claim 12, Stockmeier discloses a tissue extraction and maceration device, wherein the tissue harvesting tip (4 and 5) comprises a cone-shaped member (4) having a plurality of cutting teeth (5) formed on an outer surface thereof, as best seen in Figure 1.

8. For claim 13, Stockmeier discloses a tissue extraction and maceration device, wherein the tissue harvesting tip (4 and 5) comprises a substantially semi-cylindrical housing (4) having a cutting surface (5) formed around a periphery thereof, as best seen in Figure 1.

9. For claims 14-16, Stockmeier discloses a tissue extraction and maceration device, wherein the tissue harvesting tip (4 and 5) is adapted to penetrate tissue and remove a predetermined tissue volume when articulating from proximal and distal positions (column 1 lines 29-62 and column 2 lines 43-48), said predetermined tissue volume capable of being about 0.9 cm³.

10. For claims 22-24, Stockmeier discloses a tissue extraction and maceration device, wherein the tissue harvesting tip (4 and 5) operably connected to said shaft is

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adapted to extend beyond the outer tube by a predetermined distance (column 2 lines 43-48), said predetermined distance capable of being about 3 mm.

11. For claim 25, Stockmeier discloses a tissue extraction and maceration device, wherein the outer tube is adapted to be coupled to a vacuum pump effective to draw tissue through at least a portion of the outer tube (column 2 lines 28-29).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stockmeier in view of Altman et al (WO 99/58066). Stockmeier discloses the claimed tissue harvesting invention except for explicitly disclosing that a biasing element

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proximally biases the shaft and a trigger mechanism connected to a shaft overcome said biasing element. Altman et al teaches (a) biasing element (65) biasing the shaft proximally and a trigger mechanism (53) connected to a shaft (12 and 55) that overcome said biasing elements (page 11 lines 10-22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tissue harvesting device as taught by Stockmeier, with the biasing and trigger elements as taught by Altman et al for the purpose of increasing the ease of axially translating the tissue harvesting member and shaft during advanced surgical procedures necessitating increased patient safety.

15. Claims 4 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stockmeier in view of Shapira (US 6,358,252). Stockmeier discloses the claimed tissue harvesting invention except for explicitly disclosing the open distal end is configured to form a seal with a tissue surface or is defined by an angled edge wall further comprising ridged surface features. Shapira teaches a tissue harvesting device (10) comprising an open distal end configured to form a seal with a tissue surface and an angled edge wall including surface features, or ridges (62), as best seen in Figures 2 and 4. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tissue harvesting device as taught by Stockmeier, with the tissue sealing and surface ridges as taught by Shapira for the purpose of increasing the efficacy of a tissue extraction and maceration device by increasing the suction force on the cut tissue and for increased patient safety during advanced surgical

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procedures via a seal drawing the tissue into the device and breaking the tissue into smaller pieces with surface ridges on the edge wall.

16. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stockmeier in view of Majlessi (US 5,871,454). Stockmeier et al discloses the claimed tissue harvesting invention except for a sizing screen configured with openings comprising a diameter of 0.7 – 1.3 mm. Majlessi teaches a tissue-harvesting device (10) with permeable membrane (44") for filtering larger particulate matter, said permeable membrane capable of having openings with a diameter of 0.7 – 1.3 mm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tissue harvesting device as taught by Stockmeier et al, with the screen as taught by Majlessi for the purpose increasing the efficacy of a tissue extraction and maceration device by configuring the tissue harvesting device to filter large application specific particulates for increased patient safety during advanced surgical procedures.

17. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stockmeier in view of Altman et al. Stockmeier discloses the claimed tissue harvesting invention except for explicitly disclosing that a motor, typically electric or pneumatic, coupled to the shaft rotates at speeds ranging from about 100 to 5000 rpm. Altman et al teaches a motor (24), typically electric or pneumatic, coupled to the shaft capable of rotating at speeds ranging from about 100 to 5000 rpm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tissue harvesting device as taught by Stockmeier, with the motor as taught by Altman et

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al for the purpose of increasing the ease of rotating the tissue harvesting member and shaft during advanced surgical procedures necessitating increased patient safety.

Response to Arguments

18. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey G. Hoekstra whose telephone number is (571) 272-7232. The examiner can normally be reached on Monday through Friday, 8:00 a.m. to 5:00 p.m. EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max F. Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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